

All priorly pending claims have been canceled.

New claim 6 has been added, and is pending in the present application.

All these parts of the patent application, as now pending, are presented in a single attached document titled **SUBSTITUTE SPECIFICATION AND OTHER PARTS OF APPLICATION** which is incorporated by reference in the present Response. Such was done to facilitate examination of the present case.

The Applicant thanks the Examiner for the effort expended in examining the present patent application. The Applicant respectfully requests reconsideration and reexamination of the now pending claim. In addition to the above amendments, the Applicant makes the following remarks regarding individual issues:

* The objection to the proposed amendments to the specification based on 37 C.F.R. § 1.125:

In paragraph 3 of the First Office Action, the Examiner objected to the proposed amendments to the specification, which were thus not entered. In a subsequent telephone conversation with the Applicant's Attorney, the Examiner required a substitute specification because the proposed amendments were so numerous that made it difficult to consider the case. The Examiner further requested a substitute Abstract.

It is believed that the objection has been overcome. The Applicant hereby submits a document titled **SUBSTITUTE SPECIFICATION AND OTHER PARTS OF APPLICATION**, where the Substitute Specification is shown (along with a substitute Abstract). In addition, the Applicant hereby submits a document titled "MARKED UP COPY" that shows the changes in the specification for the record.

The substitute specification contains no new matter. In addition, the Applicant has

AMENDMENT AND RESPONSE TO OFFICE ACTION

deleted from the specification all elements previously challenged by the Examiner as new matter, namely:

- a) the requirement that the ring be "a few thousandths of an inch larger";
- b) the use of a "thin cloth material" for a strap;
- c) the use of a "simple over hand knot"; and
- d) the suggestion that the principle may be extended to applications involving other musical instruments or objects.

It is respectfully asked that the amendments to the specification be entered as presented in the substitute specification.

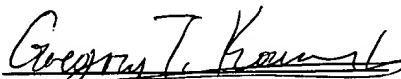
* The rejections of claim 5:

The Examiner rejected claim 5 on multiple grounds. Claim 5 has been canceled.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are either in condition for allowance or in improved form for appeal. The Applicant earnestly solicits favorable action.

Respectfully submitted,


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SubSpec part of #19/F

Attorney Docket No: PEBE.P.001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Andrew M. Perry)	
)	Examiner: Mrs. Renee Luebke
Serial No.: 08/689,721)	
)	Art Unit: 2832
Date Filed: 08-12-96)	
)	
For: (amended:) DEVICE FOR)	
SUSPENDING A RECORDER AND)	
METHOD FOR USING THE SAME)	
)	
(formerly: HALO HANGER))	
_____)	

SUBSTITUTE SPECIFICATION AND OTHER PARTS OF APPLICATION

This document is incorporated by reference into the Applicant's Response to Office Action. This document includes:

- a) an unmarked version of the amended specification of the patent application;
- b) the newly added (and only presently pending) claim; and
- c) the newly added Abstract (the former Abstract having been canceled).

(Such was made to bring all elements of the patent application in one place, and thus to facilitate examination.)



Attorney Docket No: PEBE.P.001

part of
#19/F

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In re Application of: Andrew M. Perry)

Serial No.: 08/689,721)

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SUSPENDING A RECORDER AND)
METHOD FOR USING THE SAME)

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Examiner: Mrs. Renee Luebke

Art Unit: 2832

MARKED UP COPY

This is a document showing amendments between:

- * the specification of record (version entered by Applicant's Amendment on June 2, 1997), that is being canceled by the present Amendment;
- and
- * the new specification that is being added with the present Amendment.

[SPECIFICATION]

[Title, Halo Hanger]

DEVICE FOR SUSPENDING A RECORDER
AND METHOD FOR USING THE SAME

BACKGROUND OF THE INVENTION

[a. Background.] Field of the Invention.

_____This invention pertains to the general field of [a neck strap arrangement for carrying a musical instrument or other object. In particular, it provides a new and improved method of] carrying a woodwind musical instrument known as a recorder.

[b. Objects and Advantages.]

[(1)] Description of the Prior Art.__

_____The recorder is an instrument that is of such size that it can be carried easily. This instrument is most often used by children in early grade school for instruction in music. Most often the child will purchase a recorder. The child will then carry the recorder to class and carry it in the hand during class. If the child needs to use the hands for another purpose, the recorder is laid down. As such, the recorder is [and] subject to loss, contamination or confusion when play is to be continued. Also, like with anything a child is forced to carry in their hands, the recorder [object] can be inappropriately used as a toy, weapon, or whatever fits the occasion.

Prior art is limited to some resourceful teachers that have simply tied a string around the recorder with some sort of loop that is placed around the child's neck to suspend the

recorder. Because the knots may slip, come untied or can not be readily untied, this method has not gained wide support. In addition, after the teacher has tied all the knots required by the students, the teacher has little time left for instruction. Thus, at the present time, there is no suitable means for the hand free carrying of the recorder. Also, this method has only been applied to recorders possessing a definite ridge along their [its] shaft, and not merely to recorders with a tapered shaft.

[(2)] Objectives._

_____ It is therefore an objective of this invention to provide a device for conveniently carrying a recorder [or any similar object,] with an expanding circumference shaft, from [securely affixed to] a strap that is worn about the neck.

Another objective of the invention is the realization of the above mentioned objective with simple, reliable and inexpensive hardware.

SUMMARY OF THE INVENTION

The invention provides a device for carrying a recorder and a method for using it.

The device comprises a ring attached to a strap. The user wears the strap around their neck, with the ring in the front.

The method of the invention is to pull apart the recorder at the juncture point, insert the upper section of the recorder through the ring, and slide the ring towards the mouth piece until it becomes lodged. It becomes lodged because the inner diameter of the ring is smaller than the diameter of the recorder at the mouthpiece. The recorder is then reconnected and released. The recorder thus becomes suspended from the neck of the user.

[(3) Advantages. In accordance with these and other objectives, the method and apparatus of this invention consist of a ring and an attached strap. The ring is made of durable material and is of sufficient inside diameter so as to fit, after the strap has been secured to the ring, snugly around the shaft of the mouth piece of the recorder. The ring is secured on the recorder by pulling the recorder apart at its dividing point or sliding it over the lower narrow end and then slipping the ring around the mouth piece section and sliding it up the shaft until it is securely lodged on the shaft. Because the diameter of the shaft increases towards the end where the instrument is blown, the ring will be secure on the recorder shaft between the fingering holes and the mouth piece. The two pieces of the recorder are then reconnected, if applicable.]

Using the device thus frees both hands of the user. This and other advantages of the present invention will be understood and more appreciated after a consideration of the following drawings and the detailed description of the invention.

[Various other purposes and advantages of the invention will become clear from its description in the specifications that follows, and from the novel features particularly pointed out in the appended claims. Therefore, to the accomplishment of the objectives described above, this invention consists of the feature hereinafter illustrated in the drawings, fully described in the detailed description of the preferred employment and particularly pointed out in the claims. However, such drawings and descriptions disclose only some of the various ways in which the invention may be practiced.]

BRIEF DESCRIPTION OF THE DRAWINGS

[c. Description of Drawings.]

[(1) Brief Description. This invention together with its features and advantages can be better understood from the following description when read in conjunction with the drawings in which]

FIG. 1 is a perspective view of the ring of the device of the invention.

FIG. 2 is a perspective view of the device of the invention.

FIG. 3 is a perspective view of a recorder being suspended from the device of the invention [attached to a recorder].

DETAILED DESCRIPTION OF THE INVENTION

[(2) Detailed Description. The heart of this invention lies in the simple ring, which makes it possible to conveniently attach a strap to a recorder. Thus, the main objective of providing an easy method to carry a recorder is met.]

Referring to the drawings, [wherein the same reference numbers and symbols are used throughout to designate like parts,] FIG. 1 illustrates the general configuration of the ring 1 before the strap [2] is attached to it [and it is mounted on the recorder A].

The ring 1 is made of durable material [has a surface 3 and 5 of such dimensions] so as to be able [provide strength enough] to withstand [with stand] the rigors and forces that would be [anticipated] anticipated, when the device is in use by elementary age school children. As illustrated in FIG. 1, the ring 1 has an outer surface 3, an inner surface 4 and a side surface 5. The ring also has a radial thickness, which is defined as the distance between the inner and the outer surface.

Referring to FIG. 2, the strap 2 is made of a material that is strong enough to hold the recorder, yet be comfortable when placed around the neck. Knot 6 is any knot that will neatly secure the ends of the strap 2.

FIG. 3 shows a recorder A supported by the device of the invention. The recorder A has a proximate end and a distal end. The mouth piece (otherwise known as mouthpiece) can be seen at the proximate end, since it has a larger diameter than the adjoining shaft. The recorder A defines a juncture point C between the two ends. The recorder A can be separated at juncture point C into two sections, lower section D and upper section B. The mouthpiece is included in upper section B. The shape of the recorder is one of substantial circular symmetry around an axis. That is why relevant terms like diameter are used, even though the shape of the shaft might not be exactly circular at some points.

When FIG.s 1, 2 and 3 are viewed together, it becomes apparent from scaling considerations that the radial thickness of the ring is about 1/4 the diameter of the recorder at the point of the recorder where the ring is lodged.

The relationship of the inner surface 4 and the recorder is best seen in FIG. 3. The [the precise geometry of the] inner surface 4 of the ring is circular [a circle] with a diameter [a few thousandths of an inch] larger than the diameter of the recorder A at the point of the juncture C [of the two pieces B and D of the recorder A]. The diameter of the upper [mouth piece B] section [of the recorder A] increases gradually from the junction [separation] point C to the air hole of the mouth piece [B located just above the mid point of the mouth piece B]. As the recorder diameter thus increases, at some point it becomes larger than the diameter of the inner surface 4. This will cause the ring, as it is being slid

from juncture point C towards the mouthpiece, to become lodged at some point before reaching the mouthpiece.

[The strap 2 is made of a thin cloth material that is strong enough to hold the recorder or other desired object, yet be comfortable when placed around the neck. The knot 7 is a simple over-hand knot tied in the middle of strap 2 after placing one end through the ring 1. Knot 6 is any knot that will neatly secure the ends of the strap 2.]

The method of the invention is as follows: The strap is suspended from the neck of the user. The recorder A is pulled apart to separate the two sections. The upper section is selected. The end of the upper section that includes the juncture point C (and is opposite the proximate end) is inserted through the ring. Then the ring is slid up towards the mouthpiece. The ring will thus become lodged at some point before reaching the mouthpiece. Then the recorder is reconnected and released.

Alternately, if the inner diameter of the ring is large enough, the distal end of the recorder is inserted through the ring without pulling apart the recorder. Then the ring is slid up towards the mouthpiece until lodged, as said above.

It is preferred that the inner diameter is such that lodging happens when the device is approximately one inch above the juncture point C.

[The ring 1 is attached to the recorder A by pulling apart the two pieces B and D of the recorder A at the separation point C, or, if appropriate, by sliding it upward from the small end of the recorder without separating. The ring 1 is then slide onto the shaft of the mouth piece B of the recorder 1 at the end that attaches to the fingering piece D of the recorder A. The ring 1 will slip onto the mouth piece B and then lodge at a point up the

shaft between the fingering holes and the mouth piece due to an increase in the circumference of the shaft.]

In the present description numerous details have been set forth in order to provide a more thorough understanding of the present invention. It will be obvious, however, to one skilled in the art that the present invention may be practiced without these specific details. In other instances, well known features have not been described in detail in order to not obscure unnecessarily the present invention.

[d. Description of the Invention. While the invention is described in terms of a device for providing a means of holding or carrying a recorder, it is obvious that the same principle could be extended to applications involving other musical instruments or objects. Therefore, it is understood that many equivalent devices are possible within the scope of the present invention, with different configurations of the ring. Thus, various changes in the details, steps and materials that have been described may be made by those skilled in the art within the principles and scope of the invention herein illustrated and defined in the appended claims. While the present invention has been shown and described herein in what is believed to be the most practical and preferred embodiment, it is recognized that departures can be made therefrom within the scope of the invention, which is therefore not to be limited to the details disclosed herein, but is to be accorded the full scope of the claims so as to embrace any and all equivalent apparatus and methods.]

[e. Operation of Invention.]

[It is therefore an objective of this invention to provide a device for conveniently carrying a recorder securely affixed to a strap that is worn about the neck.]

[Another objective of the invention is the realization of the above mentioned objective with simple, reliable and inexpensive hardware.]

[In accordance with these and other objectives, the method and apparatus of this invention consist of a ring and an attached strap. The ring is made of durable material and is of sufficient inside diameter so as to fit, after the strap has been secured to the ring, snugly around the shaft of the mouth piece of the recorder. The ring is secured on the recorder by pulling the recorder apart at its dividing point and then slipping the ring around the mouth piece section and sliding it up the shaft until it is securely lodged on the shaft, or, if possible by sliding over the smaller end without separating the recorder. Because the diameter of the shaft, of the mouth piece section, increases from the separation point towards the upper end, the ring will be secure on the recorder shaft approximately one inch from the dividing point. The two pieces of the recorder are then reconnected, if applicable.]

[Various other purposes and advantages of the invention will become clear from its description in the specifications that follows, and from the novel features particularly pointed out in the appended claims. Therefore, to the accomplishment of the objectives described above, this invention consists of the feature hereinafter illustrated in the drawings, fully described in the detailed description of the preferred employment and particularly pointed out in the claims. However, such drawings and description disclose only some of the various ways in which the invention may be practiced.]

CLAIMS

The invention claimed is: